either of these substances. As to the zinc, as it is not precipitable by sulphuretted hydrogen from an acid liquor, this metal must be sought for in the liquid obtained by filtration after the action of sulphuretted hydrogen. As silver can only be found in an insoluble state, it must be sought for in the residue of the first filtration.

After having thus described our process, we pass to the examination of the most sensible methods for ascertaining the presence of the different metals contained in the above table, endeavouring to avoid all the causes of error which are likely to arise. In the liquid obtained in the last place, we search simultaneously for arsenic and antimony by means of Marsh's apparatus, as modified by the Academy of Sciences: we then pass to the research after mercury, copper, lead, and tin, in the liquid contained in the apparatus, after having dissolved in *aqua regia* all that is deposited at the bottom of the bottle. As for zinc and silver, the first must be sought for in the liquid obtained by filtration after treatment with sulphuretted hydrogen; and the second in the residue of the first filtration. We have often operated on two milligrammes (1-38th of a grain) mixed with considerable quantities of animal matters.—*Dublin Med. Press,* Oct. 18, from *Pharmaceutical Journal.*

92. *Case of Poisoning by Arsenic, in which the symptoms were unusually delayed.*—Walter Clegg, Esq., reports (*Lancet,* Nov. 4, 1848) the following remarkable case of this character.

"On Sunday, August 27th, at five o'clock in the afternoon, a woman requested me to visit her niece, who had, about noon, taken a teaspoonful of white arsenic. I attended, and found a heavy, stupid looking girl sitting in her chair, more asleep than awake. On rousing her, she reeled about the room as if intoxicated; indeed, I suspected poisoning by some narcotic. But she acknowledged having swallowed 'white mercury,' and a paper packet was brought to me, from which she had taken the poison, containing about ten grains of a white powder. By means of my pocket-lens, I immediately recognized this powder to be arsenious acid. She vomited once after dinner, but there were no further symptoms until half an hour before she died—that is, at noon the following day.

"She had no sickness, no pain, no acrid eructations, no burning taste in the mouth; her face was very pale, and she was faint and giddy. The sulphate of zinc, with mucilaginous drinks, soon produced profuse vomiting, and this was kept up for half an hour. Then another medical man arrived with a jar of the hydrated peroxide of iron; and having some pressing professional engagements, I left her with my friend, who administered large doses of the antidote.

"At nine o'clock at night we visited her together. She had experienced no pain; no unpleasant symptom whatever; she was disposed to sleep quietly. At ten o'clock the next morning the patient's aunt came to say that her niece was quite well, 'might she go a gleaning?' Up to half past eleven o'clock she continued more than ordinarily cheerful, and was busied in preparing the family dinner. At half past eleven o'clock she suddenly complained of an excruciating pain in the body, with excessive prostration of strength. She went to her bedroom to lie down, and at twelve o'clock was found dead, kneeling by the bedside. Thus she died in about eighteen hours after taking the poison, and within half an hour after the first decided symptom of poisoning was manifested.

"*Autopsy, forty-eight hours afterwards.*—The stomach contained half a pint of a thin, dirty green fluid; the mucous coat was much corrugated, having a fungoid appearance, very soft, and so fragile that a touch of the finger tore it away. Three or four large reddish-brown patches were observed, and these extended into the intestine considerably beyond the duodenum. The peritonæal coats of the stomach and bowels were not inflamed; the lungs and the heart were healthy; the head was not inspected.

"It only remains for me to add that the matter vomited, and the fluids in the stomach and intestines, contained abundant evidence of the presence of arsenic. Minute fragments of a white powder were seen adhering to the mucous coat of the stomach, and these, by the ordinary tests, were proved most satisfactorily to be arsenious acid.

"*Explanation* (?)—The lower classes in Lincolnshire are very much addicted to the use of opium and laudanum. I have known women with three shillings a week from the parish spend half-a-crown in the purchase of opium. I have reason to believe that this girl was an opium-eater. Did one poison mask the evidences of the other? Did the opium suppress the horrible agonies of arsenical poisoning, thus modifying the symptoms, whilst it had no power to interrupt the effects of the deadly drug?"

93. *Poisoning with Chloride of Zinc—Suggestion of an Antidote.*—Dr. THOMAS STRATTON, Surgeon R. N., relates in the *Edinburgh Med. and Surg. Journ.* (Oct. 1848) two cases of poisoning with chloride of zinc. In both cases a wineglassful of a solution was swallowed, containing in one case about twelve grains of the salt, and in the other about two hundred grains. In the latter case burning pain in the gullet, burning and griping pain in the stomach, great nausea, and sense of coldness, were instantly felt. Vomiting followed in a few minutes. Dr. S. saw this patient twenty minutes after the accident, and instantly made a strong solution of home-made brownish soap, of which he made the patient swallow, at intervals, three or four pints. Afterwards olive oil was given, and the patient recovered. The other case was not seen by any medical man, but it also terminated favourably. Dr. S. suggests either soap or carbonate of soda or of potash, as an antidote to chloride of zinc, and relates some experiments which he has tried, and which seem to justify confidence in this suggestion.

94. *Antidote to Strychnia.*—Dr. ISAAC PIDDUCK states (*Lancet*, Nov. 1848) that camphor is an effectual antidote to strychnia. The fourth of a grain of strychnia (instead of the sixteenth, which had been prescribed for neuralgic pains) was taken by a weakly man. His muscles were convulsed with tetanic spasms. Five grains of camphor were dissolved in almond emulsion, and almost immediately after taking this dose the spasms ceased.

95. *Child born betwixt the end of the sixth and middle of the seventh month and brought up.*—ROBERT ANNAN has communicated to the *Medical Times* (June 17, 1848) a remarkable case of this character. The subject of it was a woman 38 years of age, the mother of six children, the youngest being under two years, who found herself pregnant, dating from the beginning or middle of the month of November, 1847. She was of middle stature, and had been subject to occasional attacks of dyspnœa, but otherwise was in good health. In the end of December a small, apparently glandular, tumour appeared near to the right side of the umbilicus, which gradually enlarged to nearly four inches in diameter, and suppurated. This was discharged by the knife on the 24th of February, without pain, the patient being put under the influence of chloroform, for which she expressed herself in grateful terms. A second and a third tumour, with nearly similar results, though the third was not opened by the knife, had the effect of reducing Mrs. R. to a state of great emaciation.

On the 5th of April the pains of labour came on rather unexpectedly, and in less than two hours she gave birth to a female child, which, on his arrival, Dr. A. found very carefully wrapped up and placed so as to receive the gentle warmth of a fire. Unloosening the cloths to enable him properly to tie the cord, which had been hastily cut through and tied about six inches from the navel, he found a tiny infant, the proportions of which he did not think it proper then to take time to ascertain. As it was not expected to survive long it was placed on a cushion in an easy chair, so as to be sheltered from draughts of air, and at the same time so as to receive benefit from the fire, being previously wrapped up in folds of cotton wool and covered over with flannel. An earthenware bottle, filled with warm water, which had been pretty constantly continued, was placed behind the cushion. To attempt otherwise to dress the infant was never once thought of. This was about ten A. M. As the infant showed more signs of vitality, the lips and mouth were gently moistened with a mixture of one part of cream, three parts of warm water, and sweetened with sugar. At first it was not observed to swallow, but in the evening, when Mr. A. returned, there could be little doubt that this had been the case from the minute quantities of the mixture, given from time to time, not having been rejected. On the following day, to this mixture from three to four drops of sherry wine were added, and continued to be used as yesterday. On the third